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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/352,612	07/13/1999	ARIE HENDRIK FRANS VAN VLIET	102222.01	2506

25944 7590 05/23/2003

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21  
EXAMINER

KILKENNY, TODD J

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/352,612

Applicant(s)

VAN VLIET ET AL.

Examiner

Todd J. Kilkenny

Art Unit

1733

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 13 May 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☒ Applicant's reply has overcome the following rejection(s): Yang in view of Kobiella and Romanek.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1-7 and 13-23

Claim(s) withdrawn from consideration: 9-12

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☒ Other: See Continuation Sheet

Applicant's amendment after final has been entered. The claims stand rejected as set forth below, wherein the rejection of record is reasserted (i.e. no new grounds of rejection made) including a response to applicant's arguments.

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1 – 5, 7, 13 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Vliet (CA 2,162,686) in view of Kobiella (US 4,483,438), Romanek (US 4,265,954) and Saito (CA 1,026,522).

Van Vliet discloses bonding drawn, overlapped plastic strips by welding together the strips via electromagnetic radiation. In a first embodiment, Van Vliet discloses bonding a single strip to itself by its ends and in a second embodiment Van Vliet suggests that the same bonding technique can be used to form mats from crossed strips welded together at zones of overlap (page 3, lines 4 - 30). The teaching to Van Vliet is concerned with maintaining the orientation at the welding site of the overlapped strip(s) so as to minimize the possible loss of strength by employing electromagnetic absorption particles. The weld is achieved by melting only the region containing these particles, so that outside regions (i.e. regions free of particles) are not melted so that disorientation of the strips is largely or even usually completely absent (Page 2, lines 5 – 18). The embedding of absorption particles to control melted regions from non-melted regions, describes a point bonding process as means to maintain the strength at the

zone of overlap. Again, Van Vliet discloses said welding process can be employed to form a grid-like mat. Although Van Vliet doesn't positively address the problem of early rupture, this benefit would directly flow from Van Vliet's teaching to generate fused and unfused regions in the zone of overlap of crossed strips in forming a grid-like mat.

The secondary reference to Kobiella is also directed towards maintaining the orientation and therefore tensile strength at the zone of overlap for plastic strips. In welding a single plastic strip to itself, Kobiella teaches fusing in spatially separated parallel bonding lines across the overlap as this provides a fused weld that doesn't destroy the orientation across the entire overlap and therefore maintains the tensile strength at said overlap.

Both Van Vliet and Kobiella are directed towards welding techniques that avoid disorienting the strips across the zone of overlap and therefore maintaining the strength of the strips at the zone of overlap, where in one embodiment Van Vliet like Kobiella discloses bonding a single strip to itself. Therefore, one reading Van Vliet would have been motivated to look to Kobiella as it is directed to a similar problem of bonding plastic strips. Furthermore, in view of Van Vliet disclosing a second embodiment of employing the welding technique to overlapped plastic strips in forming a grid, one of ordinary skill in the art would have been motivated to also look to Kobiella teaching in welding overlapped strips in forming grids, wherein it would have been obvious to one of ordinary skill in the art at the time of the invention to position the absorption particles of Van Vliet in at least two spatially separated bonding lines to further the degree at which

regions in the zone of overlap remain free of disorientation and therefore increase the degree to which the strength of the strips is maintained in the zone of overlap.

Romanek is cited as providing additional examples of patterned bonding (see Figures 5 – 8), including parallel bonding lines, and bonding dots patterned throughout the overlapped regions.

Saito (CA 1,026,522) is cited as being an English language equivalent to DE 2,246,051, to which Van Vliet refers to as a suitable teaching for the manufacture of a mat (Van Vliet, page 3, lines 23 – 25). Saito provides a more positive suggestion for uniaxially stretching the polymeric strips in the longitudinal direction, wherein the polymeric strips are superimposed to form a grid-like mat (see Fig 1).

Dependent claims 2 – 5, 7, 13 – 15 and 17 – 19 stand rejected for the reasons provided in the Final rejection dated 1-13-03.

3. Claims 6 and 19 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Vliet (CA 2,162,686) in view of Kobiella (US 4,483,438), Romanek (US 4,265,954) and Saito (CA 1,026,522) as applied to claim 1 above, and further in view of Hoechst (FR 1,506,163) and Foglia et al (US 3,560,291). The claims stand rejected for the reasons provided in the Final Rejection dated 1-13-03.


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Todd J. Kilkenny** whose telephone number is **(703) 305-6386**. The examiner can normally be reached on Mon - Fri (9 - 5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

TJK

TJK  
May 20, 2003

  
Michael W. Ball  
Supervisory Patent Examiner  
Technology Center 1700

# Examiner-Initiated Interview Summary

Application No.

09/352,612

Applicant(s)

VAN VLIET ET AL.

Examiner

Todd J. Kilkenny

Art Unit

1733

## All Participants:

(1) Todd J. Kilkenny.

(2) Stephen Catlin.

Status of Application: After Final

(3) \_\_\_\_\_

(4) \_\_\_\_\_

Date of Interview: 21 May 2003

Time: 1:30

## Type of Interview:

- ☒ Telephonic  
☐ Video Conference  
☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)

Exhibit Shown or Demonstrated: ☐ Yes ☐ No

If Yes, provide a brief description:

## Part I.

Rejection(s) discussed:

Claims discussed:

1

Prior art documents discussed:

## Part II.

### SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:

*A voicemail was left for applicant's representative informing him that the amendment after final to claim 1 would be entered and that a personal interview at this time (i.e. after final) was not warranted.*

## Part III.

- ☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.
- ☒ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

*TJK*  
*5/21/03*

(Examiner/SPE Signature)

(Applicant/Applicant's Representative Signature – if appropriate)